

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/04/02

Date Received: 03/14/02

Project: Metro Self Monitor, PO# M67691

Date Extracted: 03/29/02

Date Analyzed: 04/01/02

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M67691 203105-01	0.25	0.34	0.24	0.07
Method Blank	<0.05	<0.05	<0.05	<0.05

**FRIEDMAN & BRUYA, INC.**

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**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 203216-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.31	0.32	3	0-20
Copper	mg/L (ppm)	0.41	0.43	5	0-20
Nickel	mg/L (ppm)	0.21	0.22	5	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 203216-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	0.31	103	100	80-120	3
Copper	mg/L (ppm)	2	0.41	100	97	80-120	3
Nickel	mg/L (ppm)	4	0.21	98	98	80-120	0
Zinc	mg/L (ppm)	2	<0.05	106	105	80-120	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	108	111	80-120	3
Copper	mg/L (ppm)	2	106	110	80-120	4
Nickel	mg/L (ppm)	4	104	107	80-120	3
Zinc	mg/L (ppm)	2	108	113	80-120	5

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

April 4, 2002

DUPLICATE COPY

INVOICE # 02ACU0404-3

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M67691 - Results of testing requested by  
Gerry Thompson for material submitted on March 14, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010B @ \$80 per sample	\$ 80.00
Amount Due .....	\$ 80.00

FEDERAL TAX ID #(b) (6)



203105

## SAMPLE CHAIN OF CUSTODY

ME 3/14/02 A&amp;3

Send Report To

GERARD Thompson

Company

ALASKAN COPPER WORKS

Address

628 S. Harvard St

City, State, ZIP

Seattle WA 98134

Phone #

206-382-8379

Fax #

206-382-4509

SAMPLER'S (signature)

PROJECT NAME/NO.

METRO SEDIMENT M67651

PO #

REMARKS

Page # of

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Cr/Cu, Ni, Zn				
M67651	01	3/14/02	10:20	H2O	1							✓				

Friedman &amp; Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

GERARD A. Thompson

S. O'Brien

COMPANY

ALW

F&amp;B, Inc

DATE

3/14/02

TIME

11:40 AM

FRIEDMAN & BRUYA, INC.

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April 4, 2002

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

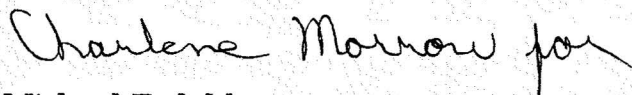
Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 14, 2002 from your Metro Self Monitor, PO# M67691 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU0404R.DOC